National Marine Fisheries Service
Endangered Species Scientific Research and Enhancement Permit Application
For Pillar Coral

Table of Contents

Introduction

This application is for requesting an **Endangered Species Act (ESA) scientific research or enhancement permit** to take[1], import, or export National Marine Fisheries Service (NMFS) protected species, including:

- Corals: Currently, this application only applies to pillar coral.

Need help or have questions?

Visit our ESA scientific research permit web page, see Additional Information, or contact us at nmfs.pr1.apps@noaa.gov.

When filling out your application:

- Your application must be a stand-alone document, readable to a layperson.
- If you do not follow these instructions, your application will be returned.
- You will need to enter this information in our online permit system APPS[2]

Entering your information into APPS:
• **Save your application every 30 minutes or you will lose information!** • Consider using these instructions as a template to draft your application in Word and then cut and paste into APPS. • To save any information you must click the "Save" button. Once the application has been initialized you will see additional sections. Your application will remain in draft mode until you submit.

Application Instructions

Project Information

Project Title: Provide a concise title that includes activities, species (or taxa if multiple species), location, and purpose. For example:

- *Collection of wild pillar coral in waters off Puerto Rico for captive studies and propagation.*

Research Timeframe: Enter the desired start and end dates of the entire project in the following format: MM/DD/YYYY. Refer to Additional Information for details about when to apply.

Duration Justification: Justify your requested permit duration. The duration should be reasonable in scale, based on your objectives, study design, and available resources. If your proposed activities may be covered under a programmatic ESA Section 7 consultation, you cannot request a permit for more than 10 years.

[1] A take under the ESA means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to do any of the preceding.

2 We are in the process of revising APPS and this link will be updated when the new system is available.

Sampling Season/Project Duration: Describe in which months or seasons you will work. If year-round, indicate when activities are most likely to occur. How frequently will you conduct your activities?

Abstract: Provide a short summary that must include:

- Purpose of the research or enhancement.
- Species that may be taken, imported, or exported (common names may be used if appropriate).
- Take activities (e.g., collection, sampling, tagging), import, or export.
- Where your activities will occur and where animals or samples will be imported or to where they will be exported.

Project Purpose: Hypothesis/Objectives and Justification

We recommend you provide the information in this order:

1. Discuss the **need for the enhancement or research** and your **objectives or research hypotheses**.
2. If your goals are to **directly enhance the survival or propagation** of an ESA-listed species, explain how your project will achieve these goals. Please note, according to the final rule, propagation of pillar coral held in captivity falls under normal husbandry and does not require an ESA permit as long as corals are not harmed, injured, or killed (i.e., the prohibitions of ESA section 9(a)(1) are not violated).
3. For research, explain how your proposed activities would further a *bona fide* and necessary or desirable purpose, taking into account the anticipated benefits for the target species.
4. Briefly summarize **published findings** related to your activities.
   - If you previously held or worked under a permit, use literature citations from that work to discuss how you previously met your objectives; and
   - Use other published literature on the subject.
5. For research, describe how this study is different from, builds upon, or duplicates past research.
6. If proposing **novel procedures**, include a discussion on results from pilot studies or studies on other species, if available.
7. Discuss why your project **must involve ESA-listed species** (e.g., explain why similar results could not be obtained by using an alternative non-endangered or captive surrogate).
8. Discuss how your project will contribute to the objectives identified in the species' recovery or conservation plan or otherwise respond to recommendations of a scientific body charged with management of the species.
9. **Take Number Rationale**: Explain how you determined your sample size or take numbers and why they are needed to meet the objectives.
   - For example, did you base your numbers on abundance estimates for your study area and the amount of field effort to be conducted?
   - If appropriate for your study, include a power analysis or other sample size estimation to show whether the sample size is sufficient to provide statistically significant or otherwise robust results.

- Your take numbers should be realistic based on your future plans as well as your previous experience.

10. Discuss whether the **same colony may be taken more than once** a year. Explain why multiple takes of the same colony are needed to meet your objectives.

Project Description

Overview

1. Provide a **brief overview of a typical day** in the field, laboratory facility, aquarium, or nursery; as well as the suite of activities you intend to perform on each animal. Discuss the order in which you'll perform the different methods. Include where your work will happen, especially if different projects occur in different locations.

Methods

Describe your methods following the guidance below. Your narrative description must match your take table (see Take Table section below).

When describing your methods, keep in mind:
• Table 1 lists specific details you may provide for commonly used methods. • If you have **multiple projects**, it is helpful to name them by project number or title and include project names in the Details column of the Take Table. • It is also helpful to reference take table lines in the narrative that correspond to the take actions and procedures. • **Mitigation measures** that are inherent to your methods may be included in this section or in the Effects and Mitigation section below. • **Figures and photographs** that illustrate your methods are useful. You can attach them on the Attachments page. • **Cite references** for the methods where applicable, but do not substitute a literature citation for a complete description.

2. **Provide clear descriptions of all methods** (i.e., each take action, observe/collect method, and procedure in your Take table).
   a. A brief statement of **how each procedure or suite of procedures relate to meeting your objectives**.
   b. Indicate the number of colonies that will be affected by your activities. This is to gauge the overall impact of your activities on the survivability and reproductive success of the coral. Include a description of the extent of how each colony will be affected with respect to the total area you may affect, the % of corals within that area that you may affect, and the number of individual branches of each colony you may affect.
   c. A list of the **suite of procedures** that will be performed on a subset of animals. Explain how you will decide which animals will receive which procedures. Is this based on sex, life stage, body size, body condition, health or appearance, needed sample size, etc?

Table 1. Guidance on Describing Commonly Used Methods

When describing your methods, include the following information, as applicable:

Take action/ procedures	Method Description Guidance
Administer drugs or other substances (e.g., antibiotics, probiotics)	Name of each drug/chemical and its purpose, including for reversal/recovery Dosage of each drug/chemical Delivery method and route (e.g., topical, immersion) Location of administration on colony Duration of each drug Post drug administration monitoring Optional: you may include a drug table with the information requested above
Captive research	Describe the procedures or experiments on the animals, if not addressed in another category in this table. E.g., exposure to altered temperature outside of ideal range, contaminants, potentially harmful chemicals, disease, or coral predators If animals will be transported as part of captive holding, complete the **Transport Information** section Information regarding holding corals in captivity must be included when requesting collection from the wild, captive experiments, or planning to release to the wild to assess the potential impacts to wild corals. As a reminder, according to the final rule, captive maintenance and propagation of coral held in captivity falls under normal husbandry and does not require an ESA permit as long as the corals are not harmed, injured, or killed (i.e., prohibitions of ESA section 9(a)(1) are not violated)

Collection and sampling of corals	Describe the collection process, including
	• Samples to be collected (e.g. gametes/larvae, fragments, cores, mucus, tissues)
	• Protocol for collecting samples
	  ○ Equipment (e.g., punch, clippers, hammer/chisel, syringe)
	  ○ If drugs are used during collection, provide the details required in "Administer drugs or other substances" above
	  ○ Sterilization or disinfection protocol(s)
	• Sample preservation and storage (if applicable)
	• Calculating take numbers:
	  ○ How many times per year will you collect from or sample each colony?
	  ○ How many colonies will you target per sampling event?
	  ○ How many fragments/samples will you take per colony per sampling event?
	  ○ What is the total number of fragments/samples will collect per colony per year (including all sampling events)?
	• What is the minimum size of colony to be targeted for collection/sampling?
	• What is the maximum size of fragments or sample to be collected?
	If you are collecting corals from the wild for propagation, provide the information required above in "Captive Research" and in the **Captive Information** section, and describe the following:
	• Type of reproduction (sexual or asexual)
	• Description of reproductive methods

Take action/ procedures	Method Description Guidance
	• Genetic testing • Estimation of capacity for maintaining recruits/progeny/fragments
Export/import/ receive samples	Indicate the type of activities requested: • Export samples collected under the requested permit or received from other legal sources • Re-import exported samples • Import samples from foreign countries • Receive samples from other U.S. legal sources for permitted activities Sample type (e.g., tissue, DNA, fragments, gametes) List the U.S. or foreign sources of samples: • Authorized persons or collections, including from your own collection; • Animals in captivity (samples from routine husbandry procedures or under separate authorization); • Animals in foreign countries; or • Bycatch associated with incidental legal commercial operations, including fishing or construction How the sample or animal was originally taken The legal authority for the original take for imported/received samples Sample preservation, storage/shipping/analysis What country are samples being exported to? Where are samples being imported or received from: high seas, name and affiliation, or country Designated port of entry for import or export See also Disposition of Tissue Samples below
Field research (Corals in the wild only)	Description of the experiment or research Chemicals, nutrients, drugs*, treatments to be used • Dosage of treatment • Method of application • Duration of treatment Frequency of activities Description of monitoring to measure impacts *Also, provide the details specified in “Administer drugs or other substances” above
Marking or Tagging (e.g., plastic tags, dyes/chemical markers)	This only applies to tags physically attached to the coral (not the substrate) and dyes/chemical markers Type of mark or tag Dimensions of tag or mark Total number and combination of tags or marks on each animal Location on colony Method of application Cleaning and disinfection procedures Duration of mark or tag Whether mark or tag would be reapplied, if lost Size of animals to receive tags including minimum size
Response and restoration	Response – Describe your activities associated with response to emergencies (e.g. vessel groundings, storm damage) Restoration – Describe your activities associated with recovering a

Take action/ procedures	Method Description Guidance
Response and restoration (*continued*)	functioning and self-sustaining reef ecosystem Associated procedures and needed information: Field Planting (outplanting and transplant/relocate): • Origin of the animals to be field planted, including location of founder (wild) animals and location animals were raised/maintained for field planting (facility or water body) • Location where animals will be field planted, including a description of the site(s) (e.g., depth, benthic community present, physical characteristics, presence of other ESA-listed corals) • Method of field planting, including health screening and site preparation • Description of and duration of monitoring to measure field planting success (attachment stability and percent survival) Other Restoration: Describe restoration activity (e.g., stabilization, reattachment, other emergency response or activity that results in contact with the species) Treatment: • Identify the chemicals, nutrients, drugs (such as for disease treatment)*, etc or other treatments to be used • Dosage of treatment • Method of application • Duration of treatment • Description of monitoring to measure treatment success *Also provide the details specified in “Administer drugs or other substances” above

3. If you will intentionally target compromised animals, explain the criteria you would use and describe the conditions of the animals.
4. **Opportunistic enhancement or research**: If there are conspecifics in the same taxa that are not your main focus, but that you would study or restore opportunistically, include a discussion of them in this section. Describe how the activities would fit within your objectives and which methods you would use to study these animals. Include separate rows for these species animals in your take table.
5. Discuss whether animals of the same species (i.e., conspecifics) may be taken (e.g., harmed) during your work. Note that you should discuss non-target taxa (e.g., marine mammals, sea turtles, and ESA-listed fish) in the Effects and Mitigation section.
6. **Data analysis**: Provide a brief description of how data and/or samples will be analyzed.

Captive Information

7. Will you be working with animals in captivity (permanent or temporary), including removing animals from the wild into captivity and research or enhancement on captive animals? Yes or No.
   If yes, address the following and explain if not applicable.

a. If removing animals from the wild, explain why removal is necessary and why you cannot obtain suitable animals from captive stock.
b. If the animals are already in captivity, indicate the name and location of the facility including *ex situ* nurseries, and as applicable, age, sex and identifiers of specific animals (e.g., NOAA ID number).
c. On the Attachments page, you will be prompted to attach a written certification from a licensed veterinarian or species expert. The certificate shall verify that this person has personally reviewed the plans for transporting and maintaining the animal(s) and that, in their opinion, the plans are adequate to provide for the well-being of the animals; and that this person or equivalent person will be available in the future to ensure the requirements of the plans are met.
d. Describe the care and maintenance of the animals, including a complete description of the facilities where they will be maintained. This includes:
    - Dimensions of the pools or other holding facilities
    - Water supply, amount, and quality
    - Sanitation practices including effluent treatment
    - Number, sex, and age of animals by species to be held in each
    - Quarantine procedures
    - Acclimation plan for introducing new and currently held animals and contingency plan if adverse responses are observed
    - Diet, amount and type

8. Indicate the disposition of captive animals at the end of your activities (e.g., euthanized, released into the wild, transferred to another facility, or retained at your facility).

Transport Information

9. Will you be transporting animals, including removing animals from the wild into captivity, transporting animals from one facility to another facility for proposed permitted activities, or outplanting? Yes or No.
   If yes, address the following and explain if not applicable.
   a. **Mode(s) of transportation:** Describe the vehicle or other platform used to transport animals.
   b. **The name of the transportation company, if applicable, and the qualifications of the common carrier to transport live animals**.
   c. **Maximum transport time including stop-overs**.
   d. **Description of the container (e.g., cage, tanks) used to hold the animal during transit**: Include details (e.g., material of container, dimensions, photos, or illustrations).
   e. **Describe any procedures to acclimate the animals to the transport equipment, containers, personnel, etc.**
   f. **Describe any special care procedures to be administered during transport** (e.g., moisture, medicines, aeration, management of environmental parameters)**.**
   g. **Identify who (e.g., veterinarian or similarly qualified person) will accompany the animal during transport.**

Project Supplemental Information

Status of the Affected Species

1. **If choosing "range-wide"** in the Stock/Listing Unit column in a row of the take table, indicate their status under the ESA and location.

Effects and Mitigation

2. **Discuss how Take Table actions** (Take Actions, Observe/Collect Method (e.g., capture), and Procedures) **will affect individual target and non-target animals**. You may include mitigation and monitoring protocols here or in the Methods section above. Do not restate those here if they are included above; simply reference the section where the following information appears.

Cite the **best available science** (i.e., peer-reviewed literature or other published data sources) and your experience (e.g., personal communication, annual permit reports). References must be made available upon request.

Group together take actions with similar responses and describe, as applicable:

- Typical physical responses
- Worst-case responses
- % of animals that typically exhibit each response type
- Average/estimated recovery time
- Wound healing time (e.g., from invasive sampling or tagging)
- Condition of animals on resight/monitoring
- Recovery from handling
- Effects on sensitive life stages (e.g., spawning adults)

3. For **novel procedures**, discuss the most likely anticipated responses based on literature from studies on other species, if available, and any results from testing, if applicable.
4. Discuss the anticipated **effects on the species**, especially if mortalities or reproductive effects are possible. On what is your determination based?
5. For **invasive procedures**, including biological sampling and instrumentation, describe your steps to prevent infection or additional harm. For example, describe if and how you will:
   - Prepare the sampling site by cleaning and disinfecting the tissue.
   - Use single-use, sterile instruments (e.g., needles).
   - Sterilize[3] other devices prior to use.
   - Use epoxy or modeling clay on exposed coral skeletons to protect it from other organisms.
6. Describe your short- and long-term **post-procedure monitoring** protocols. Explain if and why monitoring or mitigation is not feasible for specific procedures, species, situations, etc, as needed.

[3] **Sterilization** destroys or eliminates all forms of microbial life and is carried out by physical or chemical methods (CDC 2008). **Disinfection** eliminates many or all pathogenic microorganisms, except bacterial spores, on inanimate objects usually by liquid chemicals (CDC 2008).

7. Describe any **mitigation you will take to avoid or minimize impacts to non-target** protected species (e.g., marine mammals, sturgeon, sea turtles, other coral species, U.S. Fish and Wildlife Service species). Discuss whether and how they may be unintentionally harassed, harmed, or otherwise affected. Identify if you require take of these species. For ESA species designated by Distinct Population Segment (DPS), specify the DPSs.

Research Coordination

8. Describe how you will coordinate with other permit holders in your action area.
   a. List their names and affiliations.
   b. Explain how you will work together. For example, will you share vessels or coordinate the timing of field activities to avoid repeated takes of the same animals?
9. Will you collaborate with other permitted holders to share data? Will you contribute your data to relevant databases (e.g., genetic banks)? If so, list their names and affiliations and explain your collaboration plans.

Attach a References File

On the Attachments page, you will be ased to upload a **bibliography** of references cited in this application. Referenced materials must be made available upon request, as needed for evaluation of the application and preparation of ESA or NEPA analyses. If a link to your referenced material is available, add the link to your References File.

Resources Needed to Accomplish Objectives

10. Explain how your expertise, facilities, and resources[4] are adequate to accomplish your proposed objectives and activities.
11. List relevant proposals, contracts, grant awards, or letters of agreement that would demonstrate your resources. If funding is not yet secured, provide a history of funding over the past 5 years. Copies must be made available upon request.
12. Indicate the status of other international, federal, state, or local authorizations and permits you have applied for, secured, or will apply for.

Disposition of Tissue Samples

Outline what will be done with the biological samples during your research or enhancement and after your project is complete, as follows:

13. If you are performing your analyses in-house, state whether the samples will be consumed, destroyed, or curated.
14. If you are sending samples to another entity:
    a. List the name, affiliation, and location of any person or institution that will receive, analyze, or curate samples.[5]

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[4] **Expertise** includes a summary of the cumulative experience of you and your personnel. **Facilities** include such things as your existing infrastructure or laboratories. **Resources** include financial (e.g., current funding and/or history of securing funding); material (e.g., sampling equipment, boats); and other resources (e.g., collaborative partnerships that can be drawn on to support your work).

[5] Persons or institutions authorized to receive samples for analysis or curation related to the objectives of your permit are known as **Authorized Recipients**.

b. Include the sample type and purpose of transfer (type of analysis and/or curation). State whether samples will be consumed in analysis, destroyed, curated, or returned.

Authorized Recipient	Sample Type	Purpose of Transfer	Disposition
Researchers name, affiliation, City, State	Core	Ageing	Analysis and curation of remaining samples
Researcher's name, affiliation, City, State	Tissue	Analysis	Analysis (samples consumed in analysis)

15. If samples will remain after the completion of your work, indicate if you will retain legal custody of the curated samples or if you will permanently transfer custody of the samples.

Public Availability of Product/Publications

16. Describe the end products of your proposed project and how they will be made available to the public.

Project Locations

First, follow the guidance below to describe where you plan to work. Then, for each location, use the Take Table to list the species you expect to encounter and the procedures you will conduct in each location.

1. Provide information about one or more study areas
   - General area (ocean basin)
   - State(s), as applicable.
2. Enter **Location Details**, as applicable:
   - Waterbody: enter names of, estuaries, bays, etc.
   - Latitude and longitude of your study area
   - Limits of your study area (e.g., to the U.S. EEZ, to the edge of the continental shelf, to 50m depth)
   - Names of landmasses (e.g., islands) or facilities where activities will occur.
3. If you intend to import/export parts[6] that are not proposed to be collected under this permit application (e.g. importing samples collected by an international collaborator for comparison), create a Take Table with "Animal Parts" as the location for parts.
4. Use the mapper tool at the bottom of the page to denote your study location(s) or, on the Attachments page, attach a map(s) to scale that clearly shows the location of your proposed activity.

Take Table

The take table represents the **estimated** number of animals you propose to take, import, or export **annually** during your research. Please refer to our webpage for additional guidance and coral-specific scenarios.

6 Parts include, but are not limited to: any tissues (e.g., polyps), fluids, or gametes, from live or dead corals.

Columns you will fill out in the take table in APPS:

1. **Listing Unit/Stock**: For pillar coral: Caribbean/Western Atlantic
2. **Production/Origin**: Select from the drop-down list either captive or wild.
3. **Life Stage**: For coral permitting, the only unit of take is the colony.
4. **Sex**: This column is N/A for corals.
5. **Expected Take**: This represents a reasonable estimate of the number of colonies you are affecting (additional details are required in the Project Description).
6. **Take Action**: Note that the take action for corals is "Coral Activities." You will provide details about your activities in subsequent fields.
7. **Observe/Collect Method**: Select only one observe/collect method per row. If multiple methods are proposed, you must provide take information in separate rows for each method.
8. **Procedures**: Select all activities to be performed concurrently on the same animals.
   a. Choose "Other" if a proposed activity is not listed. In the Details box (see below), briefly describe what the "Other" means.
   b. You must select "Transport" if you will hold and perform experiments (e.g., exposure studies) on **wild** animals in captivity. This also applies to moving captive animals from one facility to another for an activity that requires a permit.
   c. If some animals will only get a **subset of procedures**, list this subset on a separate row.
9. **Details**: You may provide details on each take table row. This is especially useful to clarify takes, intentional repeated takes, specific activities, or projects.

Anticipated Effects on the Environment

1. Will you be working in or near areas with unique environmental characteristics or important scientific, cultural, or historical resources? Yes or No.
   Examples include:
   - Animals used for subsistence
   - Archaeological resources
   - Critical Habitat of ESA-listed species
   - Essential Fish Habitat including wetlands, coral reefs, sea grasses, and rivers
   - Federally recognized Tribal and Native Alaskan lands, cultural or natural resources, or religious or cultural sites
   - Marine Protected Areas
   - National or State Parks
   - National Marine Sanctuaries and National Monuments
   - National Historic Landmarks
   - Sites listed in or eligible for listing in the National Register of Historic Places
   - Wild and Scenic Rivers
   - Wilderness Areas
   - Wildlife Refuges

   a. If yes, please list those areas. As applicable, mention if you will need to or have already obtained permission (licenses, permits, authorizations) to work in these areas.

   b. How would your activities affect such resources? What measures will you take to ensure your work does not cause loss or destruction of such resources?
   c. For marine mammal activities in Alaska or Washington, how will you ensure your project does not adversely affect the availability (e.g., distribution, abundance) or suitability (e.g., food safety) of marine mammals for subsistence uses? Select the "Not Applicable" box.
2. Discuss if your activities have the potential to impact the physical or biological environment, in particular coastal and marine environments. Impacts can be positive or negative. Examples of potential impacts include:
   - Altering substrate while anchoring vessels and buoys
   - Using bottom trawls or other types of nets
   - Erecting blinds or other structures
   - Ingress and egress of personnel
   - Injuring or killing benthic organisms (e.g., seagrass, corals)
   - Altering the physical or chemical characteristics of water (e.g., oil spills)
   - Affecting a species' abundance or distribution
3. Invasive Species
   a. Does your project involve activities known or suspected of introducing or spreading invasive species, intentionally or not? Examples include transporting animals, discharging ballast water, and using boats/equipment at multiple sites. Yes or No.
   b. Describe measures you would take to prevent the possible introduction or spread of non-indigenous or invasive species, including plants, animals, microbes, or other biological agents.
4. Biological Specimens
   a. Will your activities involve collecting, handling, or transporting potentially infectious agents or pathogens, such as biological specimens (animals, blood, tissues)? Yes or No.
   b. Will your activities involve using or transporting hazardous substances, such as toxic chemicals? Yes or No.
   c. If yes to either question, describe the protocols you will use to ensure that public health and human safety are not adversely affected, such as by spread of zoonotic diseases, chemical injuries, or contamination of food or water supplies.
5. Do your activities involve equipment (e.g., scientific instruments) or techniques that are untested, or have unknown or uncertain impacts on the biological or physical environment? Yes or No.
   If yes:
   a. Briefly describe the equipment or techniques and provide any information about the use of these in your study area and/or with other taxa and what is known about their impacts.
   b. Discuss the degree to which they are likely to be adopted by others for similar activities or applied more broadly.

Project Contacts

The person entering the application in APPS will automatically be assigned the following roles: **Applicant/Permit Holder, Principal Investigator (PI),** and **Primary Contact**.

1. You may need to change or add personnel.
2. Use the guidance below to help you decide who should have what role.
3. To prevent duplicate entries, **ALWAYS search APPS for the person before entering a new contact.** Start with the last name in the APPS search box.
4. **Include a table** with the names of the PI and Co-Investigators (CIs), and the specific procedures they will oversee or conduct (see example Table 2). **Attach the table on the Attachments page**.
5. As you add personnel, **check whether each person already has a Qualifications Form (QF) in APPS.** It will appear next to their name once you add them to your Contacts page. If there is not a QF in APPS, then attach one for the PI and each CI. See Qualifications and Experience below.

Descriptions of Personnel Roles

A project must have a **Responsible Party if the Applicant/Permit Holder is an organization, institution, or agency**. The Responsible Party or Applicant/Permit Holder is an official who has the legal authority to bind the organization, institution, or agency and is ultimately responsible for the activities of any individual operating under the authority of the permit.

The **Principal Investigator** (PI) is the individual primarily responsible for the take, import, export, and any related activities conducted under the permit. There can only be one PI on a permit. The PI:

- Must have qualifications, knowledge, and experience relevant to the activities authorized by the permit.
- Must be on site during activities conducted under the permit unless a Co-Investigator is present to act in place of the PI.
- May also be the Applicant/Permit Holder and Primary Contact.

The **Primary Contact** is the person primarily responsible for correspondence during the application review process and after a permit is issued. Typically this person administers the permit, submits modifications (e.g., personnel changes), and submits reports. The Primary Contact may also serve other roles on the permit (e.g., Applicant/Permit Holder, PI, CI).

The Applicant/Permit Holder or Responsible Party, PI, and Primary Contact will have access to APPS to enter and edit the application, submit reports and modification requests, and will receive automatic emails from APPS.

Co-Investigators (CIs) are individuals who are qualified and authorized to conduct or directly supervise activities conducted under a permit without the on-site supervision of the PI.

- You must add CIs to the application if the PI will not always be present during the permitted activities.
- CIs can also be added or removed once a permit has been issued.

If an individual is always under supervision of the PI or another CI, they do **not** need to be named on the permit.

Table 2. Example Personnel Roles

Name	Role	Activities
Jane Smith, Ph.D.	Principal Investigator	Supervise and perform all activities under the permit
John Doe	Co-Investigator	Conduct all activities

Qualifications and Experience

We recommend the PI and each CI submit a QF. Once you fill out a QF and attach it to your profile in APPS, you won't need to upload a new QF unless you acquire new skills, your level of experience changes, or 10 years have passed. Each contact should only have **1 QF file** in their profile; it will apply to all permits they are affiliated with. They may **replace** the QF with an updated version as they gain new experience.

Persons authorized as the PI or CIs must have qualifications corresponding to their duties. Note, if the PI or a CI will be supervising but not performing specific procedures, they must demonstrate sufficient cumulative experience to oversee the project, personnel, and procedures. If you do not provide sufficient information, we will not authorize the person(s).

Attachments

You can attach files requested throughout the application on the Attachments page.

- Preferred file formats: Microsoft Word, Excel, or PDF.
- As applicable, attach a personnel table (see Table 2) with the names of the PI and CIs, and the specific procedures they will oversee or conduct.
- Example of required files, depending on the permit type: literature references, species expert statement, map, figures, and photographs.

Certification and Signature

Before you can submit your application you must authenticate your identity, certify that all information is correct, and sign the application.

Submit Application

Submit your application via our online system APPS. If you encounter problems email us at nmfs.pr1.apps@noaa.gov.

Additional Information

What is this application not for?

Research or enhancement activities on:

- Protected species parts (**only** involving importing, exporting, or receiving parts); for corals this means non-living parts (e.g., preserved samples or skeletons), see MMPA/ESA parts application.

- Coral Observations, Photography/videography, and Counts that do not result in take (no permit is needed).
- Care and propagation of corals held in captivity falls under normal husbandry and does not require an ESA permit as long as the corals are not harmed, injured, or killed.
- Treatment of coral in the wild – localized treatments for disease by experienced individuals using non-experimental methods proven to be effective and as authorized by state and territorial permits.

When should you apply?

We recommend that you apply **6 months** in advance of your proposed activities. If you have questions, please contact us at nmfs.pr1.apps@noaa.gov.

What is the process for getting a permit?

1. Follow these instructions and contact the Permits and Conservation Division at nmfs.pr1.apps@noaa.gov or 301-427-8401 with any questions.
2. Submit your application via APPS.
   a. A permit analyst will review your application and contact you if additional information is needed.
3. Address any questions within 60 days or your application will be withdrawn.
   a. Once we consider your application complete, we will publish a notice in the Federal Register, which starts a mandatory 30-day public comment period.
   b. Concurrently, we will send your application to subject matter experts in partner institutions and federal and state agencies for review.
   c. We completed a programmatic consultation under Section 7 of the ESA to assess impacts to ESA-listed species for the reclassification of pillar coral; this consultation covers most activities that could need a permit. We will determine whether or not your proposed research activities falls within the scope of this effort or if separate ESA Section 7 consultation would be required. The ESA consultation can take up to 6 months.
4. Address any questions received during the comment period.
   a. We will draft the permit and supporting documentation (including National Environmental Policy Act analyses, responses to public comments, and documentation of ESA issuance criteria).
   b. The documents will be reviewed by various NMFS offices including a legal review.
   c. For individual consultations, a Biological Opinion will be issued if ESA-listed species may be taken and adversely affected to determine if the activity will jeopardize the species or adversely modify critical habitat.
   d. The Office Director will decide whether to issue or deny your permit.

What is the process for requesting a modification to a permit?

Use APPS to submit your modification request. You'll need to provide a description of your proposed changes and include all the necessary details for those changes, as applicable. Use these application instructions as a guide. For example, changes to your objectives will require that you discuss all the points in the Project Purpose section. Additions to personnel should include QFs and descriptions of their roles.

Applicable Laws and Regulations

Under ESA Section 10(a)(1)(A) of the ESA, persons may be authorized to take threatened and endangered species for purposes of scientific purposes or enhancing the survival or propagation of the species. Interested persons are required to submit an application in accordance with the ESA and the implementing regulations at 50 CFR Part 222. These instructions for applying for a research or enhancement permit are drawn from, but do not substitute for, ESA regulations. Under NEPA, Federal agencies must assess the effects of federal actions on the environment. Under Section 7 of the ESA, Federal agencies must ensure that the permitted activities will not jeopardize the continued existence of listed species or result in adverse modification of critical habitat.

All permit documentation, including the application, permit and modifications, reports, inventory information, and any other associated documents are considered public information and as such, are subject to the Freedom of Information Act.

Paperwork Reduction Act Statement

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0648-0084. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 50 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are required to obtain a permit pursuant to the ESA, NEPA, and their implementing regulations. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief, Permits and Conservation Division, Office of Protected Resources, F/PR1, NOAA/National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910; email nmfs.pr1.apps@noaa.gov.